

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): An X-ray image magnifying device comprising:

an illumination optical system for irradiating the X-ray emitted from an X-ray source to a sample;

an objective lens configured by ~~[[an]]~~ a grazing incidence mirror composed of a rotary hyperboloidal surface and a rotary ellipsoidal surface for magnifying and focusing the X-ray having penetrated through the sample onto a predetermined position;

an X-ray image detecting means for detecting the X-ray image focused by the objective lens; and

a focusing magnification adjusting means for adjusting the focusing magnification of the X-ray image by moving ~~at least one of the X-ray image detecting means[[,]] the sample and the illumination optical system~~ along the optical axis direction.

Claim 2 (Original): The X-ray image magnifying device according to claim 1, further comprising;

a light irradiation means for irradiating the sample with a visible light or an ultraviolet light; and

a light detecting means for detecting an image by a light which has penetrated through the sample and has been reflected by the objective lens.

Claim 3 (Currently Amended): The X-ray image magnifying device according to claim 1, further comprising:

an X-ray reflection means capable of being inserted and retracted on an optical path between the objective lens and the X-ray image detecting means; and
a second X-ray image detecting means for detecting an image of the X-ray,
wherein the X-ray reflection means leads the X-ray reflected by the objective lens to the second X-ray image detecting means.

~~an X-ray irradiation means containing the X-ray source for irradiating the X-ray;~~
~~a first X-ray reflection means for reflecting the X-ray irradiated by the X-ray irradiation means in the optical axis direction of the objective lens to lead the X-ray to the sample;~~
~~a second X-ray reflection means for reflecting the X-ray which has penetrated through the sample and has been reflected by the objective lens; and~~
~~an X-ray detecting means for detecting an image by the X-ray reflected by the second X-ray reflection means.~~

Claim 4 (New): The X-ray image magnifying device according to claim 3, further comprising:

another X-ray reflection means capable of being inserted and retracted on an optical path between the X-ray source and the illumination optical system,
wherein said another X-ray reflection means reflects the X-ray emitted from the X-ray source in the direction of optical axis of the objective lens thereby leading it to the sample.

Claim 5 (New): The X-ray image magnifying device according to claim 1, wherein the X-ray image detecting means is moved so as to satisfy the following numerical expression:

$$b=aM,$$

a: the distance in the optical axis between an object point O and a joining part position S,

b: the distance in the optical axis between the joining part position S and an image plane of the X-ray image detecting means,

M: the magnification of the X-ray image magnifying device,

O: the position in the optical axis on which the sample is placed,

S: the position in the optical axis on which the joining part of the rotary hyperboloidal face and the rotary ellipsoidal face is placed.

Claim 6 (New): The X-ray image magnifying device according to claim 1, further comprising:

an illumination optical system adjusting means for optimizing the X-ray emitted from the X-ray source by moving the illumination optical system along the optical axis direction.